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a controller detecting an amplitude of the envelope signal at an off-track state of the loaded disc, and discriminates the type of the loaded disc using the detected amplitude, wherein said controller comprises:

an envelope amplitude detector detecting the amplitude of the envelope signal and sampling the envelope signal between a maximum value and a minimum value into n sample signals at a zero cross interval, and obtaining an average value of the obtained n peak-to-peak values as the detected amplitude, and

a disc discriminator comparing a level of the detected amplitude with at least one predetermined reference level and discriminating whether the loaded disc is a CD, a DVD-ROM, or a DVD-RAM, based on the comparison.

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6. (ONCE AMENDED) The optical disc discrimination apparatus of claim 1, wherein said at least one predetermined reference level is set based on conditions that a CD has a track pitch relatively larger than a DVD-ROM, thus having a larger change in the amplitude of the RF signal as an optical beam emitted by the optical disc reproducer traverses tracks thereof, and that a DVD-RAM has no change in the amplitude of the RF signal as the optical beam emitted by the optical disc reproducer traverses the tracks thereof.

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8. (ONCE AMENDED) The optical disc discrimination apparatus of claim 1, wherein said envelope amplitude detector detects a magnitude of peak-to-peak values of the n sample signals, and obtains the average value of the peak-to-peak values to determine the detected amplitude.

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11. (ONCE AMENDED) The optical disc discrimination apparatus of claim 1, wherein said controller controls rotation of the loaded disc at a speed slow enough to maintain a focusing state with respect to each of the CD, DVD-ROM and DVD-RAM in the off-track state.

12. (ONCE AMENDED) An optical disc discrimination method of discriminating a type of a disc for use in an optical disc reproducer which reproduces data from a plurality of discs with only a single optical pickup, the optical disc discrimination method comprising:

obtaining an envelope signal from an RF signal detected from one of discs which is loaded in the optical disc reproducer, at an off-track state of the loaded disc;

detecting an amplitude of the envelope signal comprising sampling the envelope signal

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between a maximum value and a minimum value into a predetermined number of sample signals at a zero cross interval, detecting the predetermined number of sample signals, and obtaining an average value of the detected predetermined number of sample signals to detect the amplitude;

comparing the amplitude of the envelope signal with at least one predetermined reference level; and

discriminating whether the loaded disc is a CD, a DVD-ROM, or a DVD-RAM based on the comparison.

14. (ONCE AMENDED) The optical disc discrimination method of claim 12, wherein said discriminating of the loaded disc as the CD, the DVD-ROM or the DVD-RAM, is based upon a condition that a change in the RF signal amplitudes as an optical beam of the optical disc reproducer moves across tracks thereof differs from each other in the CD, the DVD-ROM, and the DVD-RAM, wherein,

a first one of the at least one predetermined reference level is larger than the amplitude of the RF signal detected from the CD, and

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a second one of the at least one predetermined reference level is smaller than the first predetermined reference level and larger than the amplitude of the RF signal detected from the DVD-ROM.

15. (ONCE AMENDED) The optical disc discrimination method of claim 14, wherein said discriminating comprises:

discriminating that the loaded disc is the CD if the amplitude of the envelope signal detected from the RF signal is larger than the first predetermined reference level;

discriminating that the loaded disc is the DVD-ROM if the amplitude of the envelope signal detected from the RF signal is smaller than the first predetermined reference level and larger than the second predetermined reference level; and

discriminating that the loaded disc is the DVD-RAM if the amplitude of the envelope signal detected from the RF signal is smaller than the second predetermined reference level.

16. (ONCE AMENDED) The optical disc discrimination method of claim 12, wherein: the detecting of the predetermined number of sample signals comprises detecting a magnitude of peak-to-peak values of the predetermined number of samples; and